

condition while said pipe length continuously moves without rotation in a linear travel direction with respected thereto, followed by sufficient external heating of the fiber wrapped pipe length thereafter while continuously moving in the same linear travel direction to cause thermal bonding of all applied fibers to the outer wall surface of the underlying hollow pipe length without further melting of said underlying hollow pipe length.

Claim 2 (cancelled)

Claim 3 (previously presented) The fiber reinforced pipe length of claim 1 wherein the pipe reinforcement fibers are wrapped in the hoop direction.

Claim 4 (cancelled)

Claim 5 (previously presented) The fiber reinforced pipe length of claim 1 wherein the pipe length has a cylindrical configuration.

Claim 6 (cancelled)

Claim 7 (currently amended) A plurality of identical fiber reinforced pipe lengths joined together prior to reinforcement at the ends and each comprising a solid thermoplastic organic polymer member having an outer wall surface enclosing an inner hollow cavity having a plurality which includes multiple applied layers of continuous juxtapositioned reinforcement fibers formed with a solid material composition selected from the group consisting of ceramics, metals, carbon, glass compositions and organic polymers which further includes a thermoplastic resin binder, thermally bonded to the outer wall surface at a predetermined spatial angle with respect thereto for withstanding applied internal stress when the reinforced pipe lengths are subsequently put into service, each of said multiple applied layers having been applied successively at a predetermined spatial angle with respect thereto which differs from the spatial angle employed for the immediately preceding applied layer, the continuous fiber having been continuously applied

~~in an unbonded condition while maintaining the joined pipe lengths in their hollow condition and the subsequent thermal bonding of the applied fibers only adhering the applied fibers to the outer wall surface of the underlying pipe lengths without utilizing further adherence agents and while not further melting said underlying pipe lengths to avoid introducing thermally induced residual stress therein. said reinforcement fibers having been continuously wrapped about the outer surface of the unheated hollow pipe lengths in an unbonded condition while said joined pipe lengths continuously move without rotation in a linear travel direction with respect thereto, followed by sufficient external heating of the fiber wrapped pipe lengths thereafter while continuously moving in the same linear travel direction to cause thermal bonding of all applied fibers to the outer wall surface of the underlying joined pipe lengths without further melting of said underlying hollow pipe lengths.~~

Claim 8 (cancelled)

Claim 9 (previously presented) the fiber reinforced pipe lengths of claim 7 wherein the individual fiber wraps are aligned in ~~different spatial direction~~ the hoop direction.

Claims 10-37 (cancelled)